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# **THE POWER OF SENSORY MARKETING IN CONTROLLED CONSUMER SALES**

**Honors Thesis**

**Presented in Partial Fulfillment of the Requirements  
For the Degree of Bachelor of Science in Business Administration**

In the School of Business  
at Salem State University

By

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## ABSTRACT

Have you ever wondered why you are drawn to certain products over others? The use of our senses is something which cannot be controlled and is often taken for granted, yet sensory stimulation is what shapes both how we perceive the world around us and how we react to it.

This thesis studies how visual, auditory, olfactory, and tactile appeal can be used in a point-of-purchase retail display to positively influence consumer perception of a product or company and push the consumer to make a purchase. By setting up two mock retail displays with contrasting sensory stimuli, the thesis determines 1. Whether appeal to one sense evokes a stronger response from the consumer than appeal to other senses and 2. Which characteristics, such as a particular color or product arrangement, have the greatest impact on increasing positive perception of the display and ultimately leads to more sales. By determining what consumers best respond to, businesses will be able to adopt more effective sensory practices which may increase their profit while consumers will enjoy a more comfortable shopping experience.

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## INTRODUCTION AND OBJECTIVE

In 2010, a wise person by the name of Kanye West remarked over Twitter, “Sometimes I get emotional over fonts” (@kanyewest, 2010). While Kanye West is certainly no savant, there is a profound insight that can be provided by this quote. Can the font used in product packaging or signage influence whether or not the consumer picks up and looks at a product? What about the color used in the product display? Or the type of music, or level of volume playing in the store?

It is often communicated that in an ideal world, consumer behavior is driven by a logical decision-making process. Based on work by economist and cognitive psychologist Herbert Simon, the Rational Decision-Making model dictates that the rational consumer would 1. Identify the decision, 2. Gather information, 3. Identify alternatives, 4. Weigh the evidence, 5. Choose among the alternatives, 6. Make a decision, and finally 7. Review the decision after purchase (Hussung, 2017). However, human beings are often irrational, and neural impulses and emotions can be triggered by sensory stimuli which then push the consumer to make a decision and purchase an item with little to no conscious effort.

This thesis will focus on how changes in visual, auditory, olfactory, and tactile stimuli in a point-of-purchase retail display can impact how one perceives and responds to a product. As the “product” to be used in the experiment will not be any form of food, gustatory stimuli will not be discussed. By setting up a controlled point-of-purchase display with changing atmospherics for various days on a university campus, it will be determined if 1. Appeal to one sense seems to evoke a stronger

response from participants than appeal to another and 2. What characteristics, such as a particular color or merchandise arrangement, increases positive perception of the product and leads to more “sales”. Sales in this experiment will be determined by tracking the number of students who pick up a free product (as university prohibits the selling of merchandise) with a more careful analysis on what element of the display drew that participant to the table.

By analyzing varying stimuli engaging senses of sight, smell, sound, and touch, a comprehensive sensory-based strategy can then be concluded. By determining what consumers best respond to, businesses will be able to adopt more effective sensory practices in to their point-of-purchase displays or general retail atmospherics which may increase their profit while consumers enjoy a more comfortable shopping experience.

## LITERATURE REVIEW

From a marketing perspective, a favorable or unfavorable initial perception of a company, product, or brand is a determining factor of buying behavior. Perception can be defined as, “The act of using only one’s own sense organs to gain knowledge about, interact with, and experience the environment” (Nica, 2013). Based off this definition of perception, it is easy to see why a comprehensive sensory based strategy is crucial in establishing favorable perceptions and eventually a loyal customer base.

So how does a company establish a positive perception of its product? Neural and behavioral sciences have established that it is the subconscious mind rather than the conscious mind which drives consumer decision making and determines how we respond to ads, brands, and products (Corcoran, 1999). Therefore, when analyzing the effects of sensory stimuli on consumer perception and decision making, one must first understand the science behind the brain which dictates this subconscious response.

Studies have proven that one of the biggest contributors to subconscious decision-making is stimulation of the pleasure center of the brain. The pleasure center was first recognized in rats in a study conducted by scientists Olds and Milner in 1954. This study showed that rats would defy rules of logic by choosing to forego food and sleep in favor of a repeatedly pressing a lever which stimulated a part of the brain called the septal region. Based on this, Olds and Milner determined that this area of the rat's brain was responsible for pleasure and rewards and that stimulation of the pleasure center could be strong enough to drive the animals to death (Lipton, 2013).

Even in shopping, the pleasure center is still very prevalent in the human brain and is responsible for most subconscious decision making and impulse buying. Though one does not often literally "shop 'til you drop", the pleasure center of the brain is still strong enough to make the act of shopping addictive. Shopping triggers the release of Dopamine, a neurotransmitter which enables humans to recognize rewards and act to move toward them, causing instant gratification when a purchase or sale is made. Dopamine is activated when experiencing something new, exciting or challenging, and Stanford researchers found that even simply seeing pictures of items that you'd like to buy triggers dopamine receptors (NeuroTracker, 2016). Activation



of such receptors then encourages split-second decision making and disregard of the rational decision-making process which results in impulse shopping.

With this type of knowledge and a science called neuromarketing, scientists are now able to predict to marketers how consumers will behave in response to specific stimuli found in retail settings. Neuromarketing is a science which combines psychology, biology, and neurology and uses technology and techniques like fMRI, EEG, MEG, and TMS to establish correspondence between increased brain activity and decision influencing factors (Ariely and Berns, 2010). For example, in an experiment where subjects bid on the right to eat snacks, the amount they were willing to pay triggered an increase in activity levels in the medial orbitofrontal cortex (OFC) and prefrontal cortex of the brain. Similarly, the OFC was also activated when subjects anticipated a pleasant taste, looked at pretty faces, heard pleasant music, received money, and experienced a social reward (Ariely and Berns, 2010). By establishing these correlations, scientists were able to suggest that when any of these stimulus factors are present, marketers can anticipate similar willingness to pay in a real point-of-purchase display. In this way, marketers can more accurately manipulate sensory stimuli to more positively influence sales of a pre-determined price point.

Based on psychology and various other neuromarketing studies, much more has been revealed about what specific types of sensory stimuli positively or negatively influence consumer perception and behavior. With two thirds of the human sensory cells being in the eyes, the sense of sight or visual appeal is argued to be one of the most influential of the senses in a marketing setting (Nica, 2013). It is well

established that colors have connotations which can be used in a retail setting to evoke a desired mood within the consumer, as seen in Appendix A. Based off of this chart, a marketer could use the color blue in a display to evoke a sense of trust and dependency with the consumer, while the color orange would evoke energy and playfulness. Colors such as gray might have more negative connotations in certain displays and can evoke feelings of old-age, pessimism, boredom and decay which a youthful and vibrant company would not want to project to the consumer (Mohebbi, 2014).

Not second to visual appeal, however, is olfactory appeal. With no process necessary for the brain to recognize olfactory stimuli, the first thing a consumer might notice in a point-of-purchase display would be smell. In marketing, smell can be used in a display to evoke memories and emotions within the consumer which can improve their state of mind by up to 40% as shown by recent studies. In a study conducted by Doctor Alan Hirsch, 84% of participants preferred Nike shoes that were sprayed with a floral scent than those that were fragrance free, even believing that the scented shoes cost more money (Nica, 2013). According to a staff writer for the American Marketing Association, movie theatres will often diffuse the smell of popcorn outside their theatre to lure in customers, and swimsuit stores may use the smell of coconut and mango to make their customers feel like they're on vacation. Other times, scents can be too overwhelming as in Abercrombie and Fitch and may drive customers away (Conick, 2017). In either case, the power of smell can be quite influential towards perception of a product or brand.

In close connection with smell is appeal to taste, often used in the food or catering business. An appeal to the gustatory sense allows consumers to be more hands on and get a feel for a product, for example by asking for or receiving samples, which may initially establish or expand the customer base. Though effective when combined with other senses, this sense is much less versatile than the others and will not be further analyzed in the observational study.

Tactile stimuli can largely impact consumer behavior. Research has shown that consumers are more likely to buy an item after touching it- likely due to the sense of ownership that is created by holding an item. In an experiment conducted analyzing consumer response to cold verse warm heating pads, it was found that participants invested 43% more money after holding the warm pad, implying that people feel more secure and of sound mind when comforted by a warm temperature (Williams and Ackerman, 2011). To increase positive tactile stimulation, a marketer needs simply to arrange merchandise in a way that encourages touch by either making the merchandise at eye level or by creating “teeter-tottering” displays that consumers feel they must reach out towards to fix (Steuer, 2013).

The last sense appeal is to sound. Music is often used to evoke a certain mood that the marketer wishes to convey or can be used to establish brand association. In a series of experiments, it was even shown that music congruent with a product’s country of origin or consumer’s social identity can influence product purchasing and willingness to pay. In one such experiment, it was shown that college students consistently ordered Chinese menu items while listening to Chinese music in one room, while others consistently chose Indian menu items while listening to Indian

music in the next room. In another experiment, it was shown that classical music prompted a higher willingness to pay for luxury products while country or pop music resulted in a higher willingness to pay for utilitarian products (North, Sheridan, and Areni, 2016).

## THEORETICAL FRAMEWORK AND HYPOTHESES

For this experiment, two displays will be created which from this point forward will be referred to as Point of Purchase Display 1 (POP 1) and Point of Purchase Display 2 (POP 2). Below, I will establish two differing stimuli for each sensory appeal and then hypothesize based on the previously conducted research which stimuli I predict will be the most successful and least successful at generating sales in the context of the experiment. The comprehensive set of sensory stimuli hypothesized to appeal the most to participants and generate the most sales will then be used for POP 1 while the secondary stimuli hypothesized to be less successful with participants will be used in POP 2. In addition, it will be hypothesized which sensory appeal will be the most influential on consumer behavior where behavior is passing the display or choosing to approach and take a free product.

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<sup>1</sup> It is important to note that the stimuli discussed will reflect the holiday season in which the experiment is being conducted, with Harvard Business Review noting that a well-designed retail display reflects the needs of the consumer and the National Retail Federation reporting that 4 in 10 consumers will start their holiday shopping by November 1<sup>st</sup>, (Quelch and Cannon-Bonventre, 1983; Smith, 2018).

a. AUDITORY STIMULI AND SENSORY APPEAL

As noted previously, the experiment conducted by researchers North, Sheridan, and Areni established that music congruent with product's country of origin or consumers' social identity has the greatest impact on consumer behavior (North, Sheridan, and Areni, 2016). As the merchandise will be of varying and unidentifiable origin, this experiment will focus on music as it relates to social identity. With the target audience being college students age 18 to 24 and given the holiday context of the displays, I hypothesize that Billboard's Top 10 Most Popular Holiday Songs played at POP 1 will be the most successful auditory stimuli as it relates the most to the social identity of millennials and generation Z. Conversely, I hypothesize that softly played classical holiday music at POP 2 will be less successful at generating sales with the young participants. Overall however, I hypothesize that auditory appeal will be the most influential at bringing participants to the display as the sound will be able to carry over distances and reach a larger population.

b. TACTILE STIMULI AND SENSORY APPEAL

In this experiment, two levels of varying tactile appeal will be analyzed. With studies showing that consumers are more likely to buy an item after touching it, I hypothesize that a high degree of tactile stimulation will increase sales of POP 1 while a low degree of tactile stimulation will result in less sales for POP 2. To implement this, POP 1 will feature a mannequin prominently showcasing one of the clothing products and all the products will be displayed openly at the front of the

table. As Steur stated that creating an “off kilter” display encourages participants to fix or touch products, the clothing items will be precariously stacked and the arrangement will be imperfect (Steur, 2013). To lower the level of tactile stimulation in POP 2, all items will be arranged in cases which prohibit ability to touch any items, and all participants will need to ask to see or take any products. I hypothesize that second to auditory appeal, tactile appeal will have a very strong influence on consumer behavior with far fewer participants leaving with products when in cases compared to the approachability of seeing and touching a mannequin and products openly displayed.

### c. VISUAL STIMULI AND SENSORY APPEAL

Visual appeal is one of the more obvious appeal to the senses in any point-of-purchase display. Colors and imagery are crucial to establishing mood as seen in Appendix A which illustrates how colors can be manipulated to appeal to the target audience and instill positive perception of the brand or product. In this experiment, color will be used predominantly in tablecloths and signage which reads “Holiday Giveaway”<sup>2</sup>. I hypothesize that red will be the most effective in catching attention and establishing sales as red is 1. Shown to establish an excited and celebratory atmosphere and 2. Is related specifically to the holiday season. Red will be used in

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<sup>2</sup> Signs display at each table originally read as “Holiday Giveaway”. However, the researcher noticed during the experiment that, given the context of being set up in a business school, there was much confusion and hesitation regarding the selling or giving away of products. The researcher then changed the sign to read, “Free Holiday Giveaway” which did successfully resolve confusion and entice participants. There is something to be said in this regarding willingness to pay which could be analyzed perhaps in a future study.

POP 1 and is shown in Appendix B. I hypothesize that as black is shown to create a sophisticated and even sorrowful mood, it will not generate as many sales from the young participants looking for a fun holiday gift (Mohebbi, 2014). Black will be used for the tablecloth and signage in POP 2 as shown in Appendix C. With merchandise arrangement being categorized as a form of tactile appeal in this experiment, I hypothesize that the visual appeal of colors alone will be the third most influencing factor of consumer behavior.

#### d. OLFACTORY STIMULI AND SENSORY APPEAL

Studies have shown that olfactory appeal is a very strong influencer of consumer behavior as it triggers memories and can improve state of mind up to 40% (Nica, 2013). For this reason, I hypothesize that an easily recognizable holiday scent such as cranberry will increase number of sales in POP 1 while a more generic cedarwood scent will result in lesser sales for POP 2. While scents can influence willingness to pay and product selection, this experiment will focus more on what initially attracts the attention of participants. As smell has little range and one must already be at the table in order to be influenced by the olfactory appeal, I hypothesize that olfactory appeal will be the least influential on consumer behavior in the context of this experiment.

Based off these hypotheses on what stimuli is predicted to be the most and least successful for each sensory appeal in generating sales, my overall hypothesis is that Point of Purchase Display 1 will have more sales than Point of Purchase Display 2.

## METHODOLOGY

Based off this framework, the displays as seen in Appendix D and E will contain contrasting sensory stimuli as follows:

Sense:	POP 1	POP 2
Auditory	Contemporary Music Played at Higher Volume Level; Pop Christmas Playlist	Classical Music Played at Lower Volume Level; Classic, Piano and Choral Playlist
Tactile	High Tactile Appeal; Mannequin with merchandise on display and easy to touch. All items will be displayed at the opening of the table.	Low Tactile Appeal; Large and small cases low to table which cannot be opened to touch merchandise unless asked. Only one of each item will be displayed which will be replaced only when that display item is taken.
Visual	Bright Visuals; Red tablecloth Red printed sign with decorative printed snowflakes	Dark Visuals; Black tablecloth Black printed sign with plain, black-line border
Olfactory	Airy, Fruitier Scent; Cranberry essential oil and water mixture sprayed on tablecloth	Heavier, Musky Scent; Cedarwood essential oil and water mixture sprayed on tablecloth



By comparing the results of two displays, it will be determined what stimuli most increases sales, as well as which sensory appeal has the most influence on consumer behavior. In the context of displaying on a college campus, controlled sales will be determined by the number of participants who approach the table, the number of free products taken, and under the conditions that all products are taken, how long it takes before all items are gone and the display table closes. If sales are slow, the display table will close after 2 hours and the number of remaining items will be catalogued and compared. To control for the varying atmospherics, the majority of display items will be the same with only small substitutions made for smaller items which were not numerically able to be split between the two tables. The merchandise items come from the Salem State campus bookstore, the Bertolon School of Business, or are donation items made by Merimento, Inc. and are shown in Appendix F.

To track sales, I will first record that a person approaches the table. It will then be recorded whether or not that participant took an item from the table. The determination of which display had the most sales will be in tiers. Firstly, the display which had the most items taken will be the display with the most sales. If all items are taken, the display which “sold” all items the quickest will be noted as the more successful display. If the time frames are not significantly different, the display which had the fewest participants would be the display with the most sales since this would mean that more participants who approached the table left with an item.

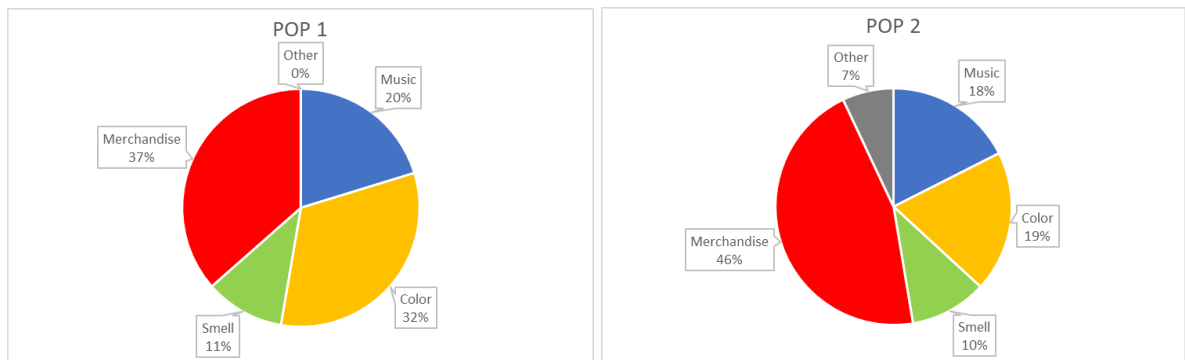
In order to help determine which sensory appeal of the four had the strongest impact on consumer behavior as well as which characteristics of the sensory appeals seem to work better than others at increasing positive perception, participants will be

given a short survey as seen in Appendix G. The date on the survey will denote to the researcher which display the results correlate with so that conclusions can be made. By analyzing the survey results of what stimuli first caught the attention of the participant and correlating it with the characteristics of POP 1 or 2, it can be concluded what conscious factors are the most influential. It is important to note that in this survey, the option titled “Merchandise” will be synonymous with tactile appeal and product arrangement for the researcher while “Color” will represent visual appeal. By analyzing the result of the atmosphere or mood section of the survey, insight will be provided as to the subconscious response to the sensory stimuli. In addition, notes will be taken by the researcher regarding participants’ physical behavior toward the displays and verbal comments made in order to further conclusions regarding the subconscious response.

## RESULTS

In four days, the tables cumulatively received 113 participants. Overall, POP 1 received a total of 62 participants while POP 2 received a total of 51 participants for a total increase in participants of 9.73% from POP 2 to POP 1. On average, POP 1 was able to close 15 minutes sooner than POP 2. With each display beginning with a cumulative inventory count of 60, POP 2 had 25% of its inventory remaining after four days with an ending count of 15 items while POP 1 had only 6% of its inventory remaining with only 4 items.

Survey results shown below provide a breakdown of what sensory appeals were first recognized by participants for each display. Results of POP 1 show that participants were first attracted to the merchandise of the table quickly followed by the color red. This is comparable to POP 2 in which participants only significantly recognized the merchandise of POP 2. From POP 1 to POP 2; color decreased by 13%, merchandise increased by 9%, music decreased by 2%, and smell decreased by 1%. Interestingly, 7% of the surveys from POP 2 show participants not circling any of the given options but instead writing comments to the effect of “the person at the table caught my attention”. This was not a factor seen at all in POP 1.



Survey results regarding the atmosphere or mood of the displays show a consistently sharp contrast between POP 1 and POP 2. POP 1 received a majority of comments describing the display as fun, spirited, happy, cheerful, eye-catching, colorful, cheerful, jolly, “Christmas-y”, festive, engaging, exciting, and bright. POP 2 on the other hand received a majority of comments describing the display as formal, peaceful, calming, positive, classy, friendly, welcoming, organized, “legitimate”, sleek, or dark.

The researcher was able to further support the variations in perception through observational notes recording differences in behavior of and personal interactions with participants. While POP 1 received a higher number of participants at a faster rate than POP 2, there were very few personal interactions- participants were quick to visit the display, quick to take an item, and then quick to leave. It was noted with POP 2 however that, while there were fewer participants, the participants would often linger to look at the merchandise items longer and were far more talkative and willing to personally interact than with POP 1. The researcher engaged in conversations regarding where participants were born and grew up, details about their childhood, and what major they were studying. The researcher was approached in POP 2 by a stranger asking for directions, and while this could very easily have been chance, it could also be a sign that POP 2 was more trustworthy than POP 1. This is also due to the fact that one participant remarked verbally about POP 2 that he thought the display was initially the school deciding to give back to its community, while POP 1 received a comment from a participant that he was cautious to approach the display because he thought he “had to do something” to receive a free item. A similar comment was made by another that POP 1, and the red tablecloth in particular, came across as “fake”. This could be connected to an observation that fewer participants were received when the researcher was standing up versus when the researcher would sit down.

Other notes included observations to how participants responded to smell and merchandise arrangement. It was noted that while most participants did not mark “smell” on the survey as a sensory appeal which caught their attention, there was a

verbal reaction to seeing that sensory appeal was an option listed on the survey. Only after recognizing in writing that there was a smell, verbal comments for POP 1 included, “Oh my god, it does smell good, doesn’t it?” and, “This smells like my childhood- what is it?”. POP 2 received more middle aged professors where POP 1 received mostly students between the ages of 18 and 24. In addition, big-ticket items such as the sweatshirts and hats were the first items to go during the POP 1 setup where as smaller items such as pencils and car decals were the first to go during the POP 2 setup.

## DISCUSSION AND CONCLUSIONS

Overall, the hypothesis was proven to be correct that POP 1 was more successful than POP 2 at increasing sales. This is due to the fact that POP 1 received more participants, closed sooner, and had significantly fewer remaining items than POP 2. By correlating the strong changes in perceived moods with the level of sales, it is determined that point-of-purchase displays which are more successful at invoking quick sales are ones that evoke emotions of cheerfulness and excitement. Verbal observations, however, show that POP 1 did come across as more fake or too aggressive whereas POP 2 seemed to be more genuine and inviting. The fact that POP 1 was still more successful than POP 2 despite these observations could perhaps be a reflection of evolving consumer behavior trends in which customers are becoming more convenience/time-oriented than people-oriented. Based off of this, companies who, by nature, are more customer-service oriented or who make commissions off of person-to-person selling could further sales by implementing techniques used in POP

2 where the salesperson influenced 7% of the participants. However, the sensory appeals used in POP 1 are more highly recommended as a sensory marketing strategy for any business trying to increase sales in a point-of-purchase retail display.

To further analyze how these sensory techniques can be used in a logical and resourceful way, it needed to be determined whether appeal to one sense seemed to evoke a stronger response from participants than appeal to another sense. By correlating the differing percentages of sensory-attributed influence, it is determined that visual appeal is the strongest conscious influencing factor in increasing sales. This can be concluded as the more successful POP 1 showed color being recognized 13% more by participants than in the less successful POP 2. Given the amount of positive comments regarding the smell of POP 1, only upon the sensory appeal being pointed out by the survey, it can be determined that smell is the most influential subconscious factor at increasing positive perception and overall sales. For these reasons, it is recommended that companies looking for an easy, sensory-based strategy with includes both conscious and subconscious influencers, should focus their efforts on the visual and olfactory appeal, only to be further supplemented by tactile and auditory appeal if resources allow.

To further the implementation of these appeals, it needed to be determined which sensory characteristics most increased positive perception among the participants.

These conclusions are as follows:

a. VISUAL APPEAL

The visual appeal concluded to be most successful was red. This could be because of the context of the holiday where red is associated with being joyful and cheery as was often denoted in the comments of the surveys. This increased positive perception more so than the black color used in POP 2 which seemed to evoke trust. This confirms color association theory as shown in Appendix A.

b. OLFACTORY APPEAL

The scent concluded to be the most successful was the easily recognizable scent, in this case the cranberry scent used in POP 1. At a subdued level, this is a powerful appeal which taps in to the consumer's memories and emotions. Many participants associated the cranberry smell with the happiness of the holidays as well as their childhood having lived in one of the top cranberry-producing states in the U.S. While this is an example of how consumer research can supplement olfactory appeal, any recognizable scent present that most people will have experienced at some point in their life will likely subconsciously push the consumer to make a purchase.

c. TACTILE APPEAL AND PRODUCT ARRANGEMENT

High tactile appeal is concluded to be the most successful at increasing sales. This is concluded from observations showing that the big-ticket clothing items such as the sweatshirts and hats were the first items to go in POP 1 where they were easily

accessible to touch. This is compared to the results of POP 2 where those same items had a low level of tactile appeal being in the cases and therefore took significantly longer to sell. With visual appeal being the most influencing sensory appeal, there is also a concept to be explored in the idea of the product arrangement being visibly taller and more spacious as in POP 1 than in POP 2.

#### d. AUDITORY APPEAL

The music which is concluded to be the most successful at increasing sales is the one which best relates to the target audience's preferences. In the context of selling to college students during the holiday season, the "Pop Holiday Music" playlist most directly related to the audience as POP 1 received the most college students during tabling. On the other hand, POP 2 received the most middle-aged participants as "Greatest Orchestral Holiday Classics" tends to resonate with older generations. This involves both determining and researching the target audience in order to be successful in appeal to the auditory sense.

#### RECOMMENDATIONS

The goal of this paper was to determine an easily implemented, comprehensive strategy to help any business get a basic understanding of how sensory-based marketing practices can influence perception and sales in a positive way. This experiment determined which sensory appeal is the strongest influencer of sales as



well as which characteristics within each sense appeal tend to be more successful than others.

However, there were many limitations in this experiment which hindered the scope of the results. With the retail displays being set on a college campus, the monetary selling of items was prohibited. It is recommended for future studies that the topic of willingness to pay be explored. Research suggests that willingness to pay fluctuates greatly with retail atmospherics and consumer perception, and it would have been very beneficial to test how participants' willingness to pay could change in response to the sensory stimuli implemented in this experiment. Another recommendation for more funded research is the introduction of neuromarketing technologies in the experiment. Without this technology available, it can only be informed speculation as to the exact subconscious power of each sensory appeal. While some neuromarketing research does exist showing the effects of willingness to pay on the brain and in relation to certain, specific sensory appeals, there is not enough neuromarketing study to support a comprehensive strategy detailing how companies can utilize the appeal of any sense in a point-of-purchase display to resourcefully and impactfully increase sales. Finally, there are so many specific sensory characteristics which could be explored, each in their own experiment. More experiments should be conducted to test philosophies such as color associations, memory recall, and tactile-ownership association. Future experiments could test a wider array of colors, smells, and music genres, all with varying products and price ranges. There is so much to explore in the field of consumer behavior and

neuromarketing as trends shift to keep up with evolving technologies and data marketing practices.

## References

- Ariely, D., & Berns, G. S. (2010). Neuromarketing: The Hope and Hype of Neuroimaging in Business. *Nature Reviews Neuroscience*, 11(4), 284-292. EBSCOhost, doi:10.1038/nrn2795.
- Conick, H. (2017, August 1). Good Smells are Good Marketing: How to Use Scent to Your Advantage. Retrieved from <https://www.ama.org/publications/eNewsletters/Pages/good-smells-good-marketing-how-use-scent-advantage.aspx>
- Corcoran, D. B. (1999). 1.» NeuroMarketing–Top 7 Insights to Unlocking Your Customer’s Brain for Instant Sales.«. Retrieved October, 22, 2018.
- Hussung, Tricia. “7 Steps of the Decision Making Process.” Concordia University, St. Paul Online, 10 Feb. 2017, [online.csp.edu/blog/business/decision-making-process](http://online.csp.edu/blog/business/decision-making-process).
- Kanyewest. (2010, August 17). “Sometimes I get emotional over fonts” [Twitter Post]. Retrieved from <https://www.esquire.com/uk/culture/news/a4120/kanye-west-his-21-best-quotes/>
- Lipton, D. (2013, June 18). Olds & Milner, 1954: "reward centers" in the brain and lessons for modern neuroscience. Retrieved from <http://web.stanford.edu/group/neurostudents/cgi-bin/wordpress/?p=3733>
- Mohebbi, B. (2014). The art of packaging: An investigation into the role of color in packaging, marketing, and branding. *International Journal of Organizational Leadership*, 3(2), 92–102. Retrieved from <http://corvette.salemstate.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid&custid=ssc&db=buh&AN=116308417&site=ehost-live&scope=site>
- NeuroTracker. (2016, December 18). Why Shopping Makes You Feel High. Retrieved from <https://neurotracker.net/2016/12/18/shopping-makes-feel-high/>
- Nica, R. (2013). The Impact of Sensory Branding on Consumer Behavior. *Journal of Media Researcher*, 50-74.
- North, A. C., Sheridan, L. P., & Areni, C. S. (2016). Music congruity effects on product memory, perception, and choice. *Journal of Retailing*, 92(1), 83–95. <https://doi.org/10.1016/j.jretai.2015.06.001>
- Quelch, J., & Cannon-Bonventre, K. (1983, November). Better Marketing at the Point of Purchase. Retrieved from <https://hbr.org/1983/11/better-marketing-at-the-point-of-purchase>
- Smith, A. S. (2018, October 24). Consumers will spend 4.1 percent more than last year during winter holidays, according to NRF survey. Retrieved from <https://nrf.com/media/press-releases/consumers-will-spend-41-percent-more-last-year-during-winter-holidays-according>

Steuer, L. (2013, April 22). Making Cents Off Our Senses: How Retailers Manipulate Us to Impulse Buy and Spend More Money.

Williams, L., & Ackerman, J. (2014, July 23). Please Touch the Merchandise. Retrieved from <https://hbr.org/2011/12/please-touch-the-merchandise>

## Appendix A

### The Connotations of Color in Daily Life and Marketing

Color	Connotation
Red	celebration, purity, passion, strength, energy, fire, love, excitement, speed, heat, arrogance, ambition, leadership, masculinity, power, danger, blood, war, anger, revolution, and communalism
Blue	depression, tranquility, trust, confidence, conservatism, dependability, wisdom, wealth royalty, truthfulness, and creativity
Green	growth, rebirth, renewal, nature, fertility, youth, good luck, generosity, health, abundance, stability, and creative intelligence
Yellow	sunlight, joy, earth, optimism, intelligence, hope, liberalism, wealth, dishonesty, weakness, greed, decay aging, femininity, gladness, sociability and friendship
White	youth, sterility, light, reverence, truth, snow, air, cleanliness, coldness, fearfulness and humility
Black	absence, rebellion, modernity, power, sophistication, formality, elegance, mystery, style, evil, emptiness, darkness, seriousness, conventionality, unity, sorrow, professionalism, and sleekness
Gray	elegance, respect, reverence, wisdom, old-age, pessimism, boredom, decay, dullness, urban sprawl, intense emotions, balance, mourning, and neutrality
Orange	energy, heat, fire, playfulness, gaudiness, arrogance, warning, danger, desire, royalty, and religious ceremonies and rituals
Brown	calmness, boldness, depth, natural organisms, richness, tradition, heaviness, poverty, dullness, roughness, steadfastness, simplicity, dependability, friendliness and aids in stimulating appetite and is popularly used for advertising various bakery products, chocolates, foods and flavors
Pink	gratitude, appreciation, admiration, sympathy, socialism, health, femininity, love, marriage, joy, innocence, flirtatiousness, childlike behavior and symbolizes sweet taste
Purple	nobility, humility, spirituality, ceremony, mystery, wisdom, enlightenment, flamboyance, exaggeration, sensuality, pride, and lavender essence
Indigo	spirituality and intuition
Violet	elegance, grace and artistic creativity
Magenta	artistic creativity
Rose	optimism, hope and love and used in advertising to signify rosy flavors

Source: Mohebbi, B. (2014). The art of packaging: An investigation into the role of color in packaging, marketing, and branding. *International Journal of Organizational Leadership*, 3(2), 100.

Appendix B  
Red Sign Used in POP 1



## Appendix C

Black Sign Used in POP 2

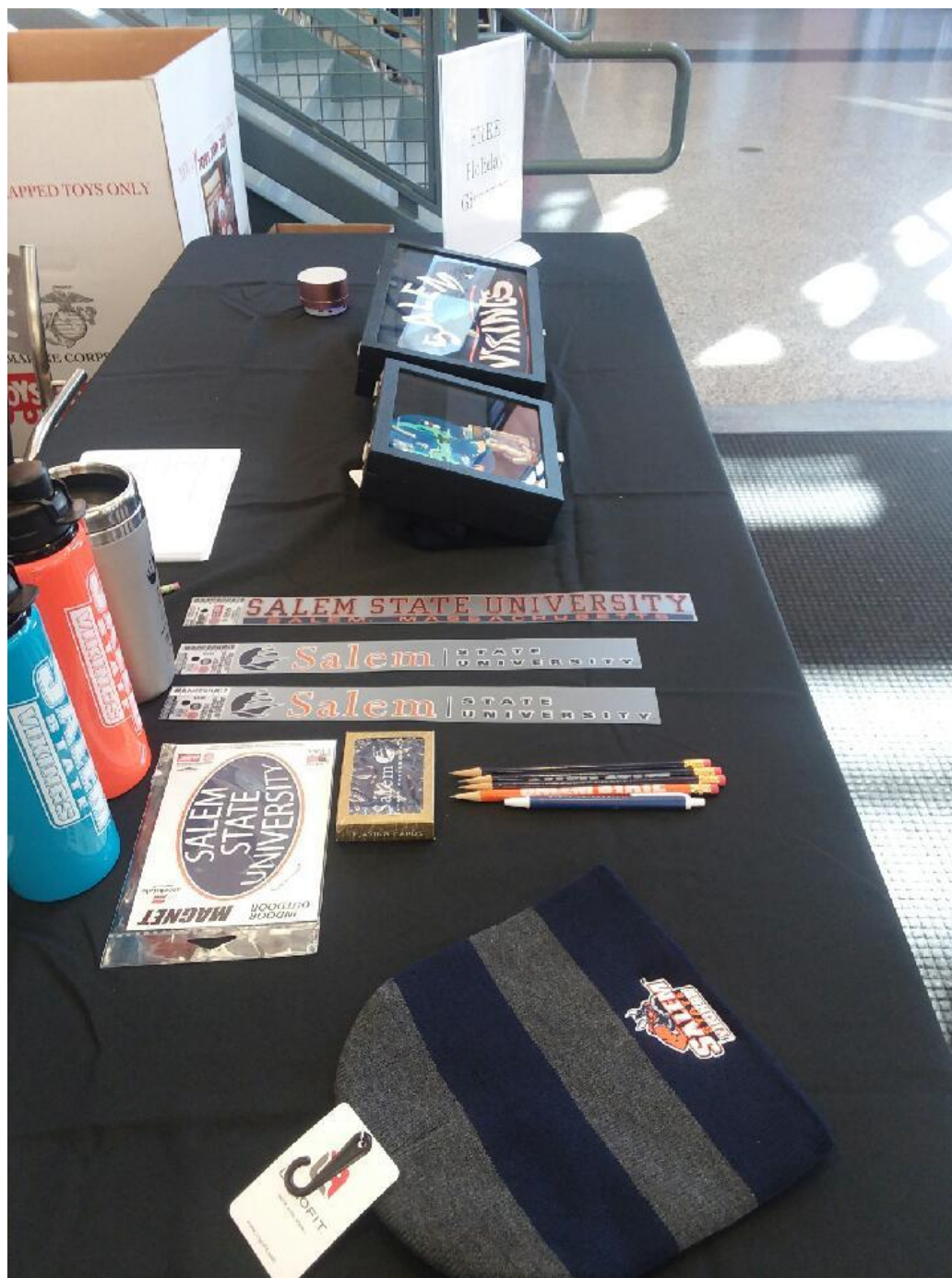
FREE  
Holiday  
Giveaway

Appendix D  
Image of POP 1





Appendix E  
Image of POP 2



## Appendix F

### Starting Inventory of Tabling Items

<b>Starting Inventory</b>					
Item	Tuesday 12/4	Wednesday 12/5	Thursday 12/6	Friday 12/7	
	POP 2	POP 1	POP 2	POP 1	
Crew Neck Sweatshirt	2	2	2	2	
Hats (striped, plain)	3	3	3	3	
Aluminum bottles (orange, blue)	4	4	4	4	
Static Clings	3	3	3	3	
SSU Pencils	4	4	4	3	
SSU Pen	1	1	1	3	
SSU Magnet	1	1	1	2	
SSU Deck of Cards	1	0	1	0	
SSU Leather ID Holder	0	1	0	0	
Lanyard	1	1	1	1	
BSB Cup	1	1	1	1	
Ornament- lighthouse and anchor	3	3	3	3	
Ornament- lighthouse, boat, and lobster	3	3	3	3	
Ornament- disk of map with stand	3	3	3	2	
Final Starting Item Count per Day:	30	30	30	30	
Final Total Count:					120

Appendix G  
Blank Survey Administered to Participants

(Date)

What part of the display first caught your attention?

- ☐ Music
- ☐ Color
- ☐ Smell
- ☐ Merchandise

Did you take an item?

- ☐ Yes
- ☐ No

If yes, what item did you take?

- ☐ Bookstore item
- ☐ BSB item
- ☐ Ornament

Please describe the display in one word.

I.E. Atmosphere or mood of display, or anything that caught your attention

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